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Suit No: CI 93-01-74984
(Winnipeg Centre)

COURT OF QUEEN'S BENCH OF MANITOBA

BETWEEN:	
FOYER VALADE INC.,	For the Plaintiff: M. Finlayson and M. Richards
Plaintiff,	
-and-	For Red River Construction Company Limited: D. Hill & D. Brownridge
RED RIVER CONSTRUCTION COMPANY LIMITED, NEWKLAS CONSTRUCTION CANADA LTD., DAPLEX PLUMBING & HEATING LTD., NUMBER TEN ARCHITECTURAL GROUP, AND HYMAN DASHEVSKY, and THE CITY OF WINNIPEG	Newklas Construction: No Appearance Daplex Plumbing & Heating D. Skwark & S. Blake Number Ten Architectural Group: K. Dixon
Defendants.	For Hyman Dashevsky: J. Zang For The City of Winnipeg: No Appearance
	Judgment Delivered: June 27, 1997

KENNEDY, J.

In 1987 Foyer Valade Inc. ("Foyer") sought the architectural services of Number Ten Architectural Group ("Number Ten") to construct a "150" bed nursing home in the City of Winnipeg.

Number Ten retained the mechanical engineering firm of Hyman Dashevsky, ("Dashevsky") to perform the engineering design requirements for the construction, including the preparation of plans and specifications for all of the mechanical work.

Newklas Construction Canada Ltd. ("Newklas") was engaged by Foyer as the general contractor, who subcontracted with Peters Plumbing, now known as Daplex Plumbing & Heating Ltd. ("Daplex") as the mechanical contractor to complete all of the outside services work and the plumbing installation inside the building.

Daplex subcontracted the outside services to Red River Construction Company Limited ("Red River") and that portion of the interior sprinkler system brought into the building, being the segment which ultimately failed.

In April 1993, the portion of the fire sprinkler system installed by Red River blew apart, extensively flooding the crawl space and basement of the building, causing substantial damage to equipment and machinery. The parties have agreed on the quantum of damage caused by the flooding in the amount of $575,000.00 including interests and costs to June 20, 1996.

Foyer sues each of the above named parties alleging breach of contract against Number Ten, and Newklas, and negligence against Daplex and its sub-trade Red River and Dashevsky, there being no contractual connection between the plaintiff, and Dashevsky, Daplex or Red River.

Number Ten denies any liability, but if it should result Number Ten seeks indemnity from Dashevsky.

Newklas filed a general denial but did not participate in the trial, the court having been advised that the company was no longer in existence and had no insurance.

Daplex denies liability but cross-claims against Red River, Dashevsky, Number Ten and Newklas. Red River also denies any liability, but seeks indemnification by way of cross-claims against Daplex, Newklas Number Ten and Dashevsky, if it is found negligent.

All claimants have abandoned claims against the City of Winnipeg and accordingly its involvement in these proceedings has not been examined.

Red River, as the outside contractor, normally brings the underground pipes from the City of Winnipeg's closest water main to within a few feet of the foundation. The evidence here satisfies me that an outside contractor does not perform work inside the building as a rule, unless requested to do so. In this case the mechanical contractor, Daplex, directed Red River where the riser

would be placed in the crawl space inside the building and expected Red River to bring the sprinkler system to that point.

Outside work is, for the most part, muddy and dirty work and involves different trade skills. Red River, although it was the outside contractor, undertook a portion of the interior work involving the installation of the riser pipe and prepared its bid on that basis notwithstanding the usual terms applicable to the outside contractor, as found in the bid depository. This finding conflicts with the evidence of Mr. Whither, ("Whither") the respected owner of Red River, but I do not accept that this additional work performed by Red River at considerable expense, was done merely as an accommodation to Daplex.

Details of the Pipe Failure

Red River installed the water system by connecting the City of Winnipeg watermain to the building. The installation included two parallel pipes, one for domestic waterline services and the other a pressurized waterline for the fire protection sprinkler system.

Once inside the building, the fire sprinkler waterline continued underground through a six inch PCV pipe leading to a ninety degree elbow attached to a "riser" or "transition pipe", taking it above grade where it was fitted on the top, with a blind flange.

Red River installed a lower ninety-degree, coated cast iron elbow, and secured it with a concrete installation underground known as a "thrust block".

The thrust block provided support at the elbow to prevent pressure at that location from separating the horizontal and vertical pipes.

The vertical portion of the installation was joined to the lower ninety-degree elbow at the thrust block and plugged at the top of the riser by a combination of a uniflange attached to the blind flange. The upper uniflange and blind flange were secured to the lower elbow with tie rods or restraining rods.

The tie rods were bolted at the bottom to fittings or "ears" on the ninety-degree elbow, then bolted to the fittings on the top of the riser to the uniflange. The rods at the bottom were partially imbedded by Red River, into the concrete thrust block.

Red River, after completing its installation, pressure tested the system by opening the valve from the City's waterline, increasing the pressure to a maximum of 150 pounds PSI. The system, including the vertical riser installation secured by the two restraining rods, held together under the expected pressure. It was these two rods which ultimately rusted through and broke apart, giving rise to this litigation.

After Red River completed its portion of the work the interior plumbing contractor extended the sprinkler system by a further ninety-degree elbow. This upper elbow was attached to the riser utilizing the same bolts used to secure the restraining rods onto the uniflange. Six additional bolts were added to hold the second ninety-degree elbow securely in place. When completed, the restraining rods fastened the bottom of the riser to the top preventing it from separating

between the upper and lower angles. Red River backfilled the installation, leaving approximately one third of the rods and riser exposed and left the site.

In April, 1993 the restraining rods rusted through and broke apart, causing the riser at the bottom to separate, flooding the crawl space and basement area causing extensive damage.

The flooding was first noticed by the staff within the facility at approximately 2:00 a.m., when the nurse on duty heard the sound of the water flowing in the basement and pulled the fire alarm, bringing the City of Winnipeg Fire Department to the site within five or six minutes. The delay in shutting off of the water was prolonged due to a miscommunication to the City's water department. I am satisfied however, that the staff of the Foyer acted reasonably and appropriately in notifying the City of the pipe rupture.

This lawsuit is over the apportionment of liability between the defendants found to be responsible for the failure. All of the defendants seek contribution and/or indemnification from each other.

There is no mystery how the rupture occurred. The mild steel rods used as restraints, exposed to highly corrosive soil, completely deteriorated in time and following a surge of pressure broke apart releasing their hold on the riser at the lower ninety-degree elbow.

Numerous experts were called to confirm that the mild steel rods used in the installation were totally unprotected by any corrosive retardant material and

when exposed to the high sulphate content of the soil eventually rusted through, releasing their hold within that portion of the fire sprinkler system.

There was without any doubt an awareness by all parties that Manitoba soils contain significant corrosive agents, which would corrode unprotected mild steel.

The Architect

Before the installation of the sprinkler line began, the architect, upon inspecting the structural components of the project, was concerned with the possible deterioration of the concrete pile caps and whether they would withstand the corrosive nature of the soil. A geotechnical firm of engineers (Dyregrov and Burgess, Appendix "A" to exhibit 18) performed soil testing at the request of the architect, which confirmed the high presence of sulphates within the soil.

The tests however focused on the treatment of the piling system and structural aspects of the project within the responsibility of the architect, rather than on the underground water installation, but it gave clear notice that materials placed underground should be protected. The evidence of the corrosivity of the soil was made known to the architect by the report but it was not provided directly to the others.

The Mechanical Engineer

Dashevsky, based on his experience with Manitoba soil, was also aware of its highly corrosive nature. He attended the site meeting when the architect discussed the soil tests (Exhibit 35) and by his evidence he specifically confirmed he was aware the soil was highly corrosive. The thrust blocks he specified in the plans and specifications were to be made of sulphate resistant concrete, (kalicrete) which recognized the significant degree of corrosivity in the soil and the need to protect the installation from it.

Red River

Whither testified that the elbow joint had a factory bituminous coating which was corrosive resistant and that the thrust block was made of kalicrete cement used across Canada for underground concrete work. Whither also testified that changes had taken place in the industry to the point where, at the time of this installation, PVC plastic piping was called for due to ongoing corrosive problems. He specifically commented on having knowledge that, "we have very corrosive soil in Winnipeg" and his company "was not a stranger to problems of corrosion". Red River Construction, based on its experience, was aware of the effect of the soil on "mild steel" of the type used in this system.

I accept, based on the evidence, the general proposition that contractors working with installations of this type in Manitoba are aware of the corrosive nature of the soil. While I have concluded that Red River undertook, as part of the outside services contract, to bring the outside pipe under the foundation into

the building, the inside work is normally performed by the mechanical contractor, in this case, Daplex.

Daplex

Daplex engaged Red River to do the inside installation. But, by knowing the nature of the work to be performed by Red River on the inside, it must have possessed the knowledge of the soil conditions, although it relied upon Red River for this portion of the installation. Because I find the work was not normally the work of the outside contractor, Daplex had an obligation contractually to the general contractor to ensure the work was properly completed.

The Plans and specifications

Red River and Daplex each claim that the mechanical specifications prepared by Dashevsky, inadequately spell out the details of the riser installation and in particular, they do not include a detailed drawing of the installation itself. Dashevsky argues the specifications, #15500 include plumbing and fire protection-related work and item 2.03.1 requires compliance with the mechanical general provisions of #15010 of the specifications and reference codes.

Dashevsky points out that section 1.03 of section #15500 requires that codes, standards and approvals be followed, and that the contractor is to conform with the requirements of the plans, specifications, the local authority having jurisdiction, the Manitoba Building Code and the NFPA pamphlets.

Section #15500, item 3.02 (regarding piping) requires the contractor to install piping to conform to reference codes, standards, specifications and good trade practices. Dashevsky argues Red River did not follow these directions.

Dashevsky further maintains that both Daplex and Red River were properly directed by the general specifications insofar as the installation of the riser was concerned and that they were directed as to the materials and proper installation of the restraint rods.

Of particular importance is that Dashevsky claims NFPA 13 and 14 adequately describe the type of connections required involving underground and above ground piping.

NFPA regulations provide as follows:

13 (i) sec 2-8.1; Connection to Underground and Above Ground Piping

> The connection between the system piping and underground piping shall be made with a suitable transition piece and shall be properly strapped or fastened by approved devices, The transition piece shall be protected against possible damage from corrosive agents, solvent attacks, or mechanical damage.
>
> (My emphasis)

NFPA 14 (i): 7-4.2 Where Corrosive Conditions Exist or Piping is Exposed to the Weather, Types of Pipe, Tube, Fittings & Hangers, and Protective

Corrosion

> Resistive coatings shall be used. If steel pipe is used underground, it shall be protected against corrosion before being buried.

Dashevsky also relies upon NFPA 24, which refers specifically to pipe clamps and tie rods, and describes the typical connection for a standpipe riser.

Both NFPA 13 and 14 are specifically referred to in #15500 of the mechanical specifications where a more circuitous route must be followed to find NFPA 24. At least one of the experts claimed that it would be difficult to find the application of NFPA 24 to this project when the other NFPA references are distinctly set out in the specifications themselves.

Mr. Bruce Ball, a metallurgical engineer, opined that NFPA 24 ought to have been specifically included because it dealt with the very connection that failed. I note however that Mr. Ball is not a mechanical engineer or architect, nor does he practise in Manitoba or do mechanical designing. Ball's expertise is in metallurgy, but he is a consultant to architects and mechanical engineers on various projects and is aware of the basic requirements. I remain of the view that trades following the plans and specifications would have been aware of the provision of all NFPA requirements notwithstanding the fact that NFPA 24 was not specifically referred to.

All contractors, be they sub-contractors or their subs, must follow the specifications as they relate to their portion of the overall contract. In this case Red River was bound by NFPA 13 and 14. These two references in the

plumbing portion of the general specifications, despite the absence of a specific reference to NFPA 24, should have, by themselves, adequately alerted the sub-trades and in particular Red River, to the need to protect the restraining rods. Likewise, I do not conclude that it was necessary to provide detailed drawings. Red River had designed the riser in rough compliance with NFPA 24 intentionally or otherwise, and the only issue was the protection of the restraints, which was adequately referred to in NFPA 13 and 14.

The provisions of the general specifications bind both contractors and sub-trades. I am also satisfied that with the knowledge of the soil conditions and the obligation to follow the specifications, both Daplex and Red River were obligated to follow the requirements of NFPA 13 and 14 and provide protection to the installation from corrosive agents.

Liability of Red River

It is Red River's contention that the installation of the restraint rods was of a temporary nature and merely to provide an opportunity to test a segment of the fire sprinkler installation. It follows from this position that if the rods were merely put in place on a temporary basis, Red River did not direct its thinking to the effect of corrosive soil on mild steel or the application of NFPA 13 or 14.

Red River claims that the restraining rods ought to have been removed by the plumbing contractor who continued the installation of the fire sprinkler line. Red River maintains that the next contractor ought to have provided for a further thrust block at the upper end of the riser, if a further 90-degree elbow was to be

installed. The plans and specifications make no reference, in that portion of the plans affecting the outside contractor, to the installation above the top of the riser, and Red River argues it became Daplex's obligation to provide the permanent restraint for the riser.

The plans do indicate there is a 90-degree elbow at the top of the riser and whenever there is a turn in the direction there must be a thrust block or restraint of a permanent nature. Red River argues that the top angle of the riser might have been secured to the upper concrete slab and that the permanent restraint was the responsibility of Daplex. It was not, however, the upper portion that gave way in 1993, it was the lower end installed by Red River that failed.

There is on the other hand, ample evidence provided by experts in the field that the restraints installed by Red River were to be permanent. Dale Glover, a mechanical engineer of considerable experience, reported (exhibit 40 p.2):

> Red River has indicated that the restraining rods were temporary and for testing purposes only. I have never in my 42 years experience seen a temporary installation and Red River's claim does not make sense to me. To change to "permanent" rods it would be necessary to excavate around the pipe riser, chop out the concrete, replace the rods, repour the concrete and backfill.

David E. Cross, an engineering consultant called by the defendant Dashevsky, states in his report commenting on the conclusions arrived at by

George Pratt P.Eng. as follows

> It is most difficult to fathom that a knowledgeable contractor would install a non-permanent restraint devices (sic) (buried in concrete) for the reasons given without documenting in great detail to the consultant, the mechanical contractor, owner, or who ever that they had only installed a temporary restraint. This at least could have been documented at one of the site meetings. I can guarantee that if the mechanical contractor whom Red River was a sub to, had been told that the restraint is temporary the mechanical contractor would have berated Red River and made them replace the restraint.

As an owner and operator of a construction company, Gordon J. Cox, called by Daplex testified that he had never heard of any sewer and water contractor installing restraining rods for the purpose of testing only.

One is easily led to the conclusion that the rods imbedded in the lower thrust block and attached to a blind flange, which is coupled to the upper 90 degree angle, was intended to be a permanent installation. Furthermore, Red River, upon completing its portion of the installation, backfilled the area leaving exposed the top one third, providing a further indicator that the installation was intended to be permanent and the rods were not to be removed.

Evidence was led that a thrust block attached to the upper slab, as Red River had suggested, would not be satisfactory due to the possible shifting in the soil causing the upper restraint to come apart. The evidence therefore supports

the view that the installation of the type Red River installed was permanent and ought to have been safeguarded against corrosion.

The general provisions require that any temporary facilities to aid in the performance of work must be removed on completion. While it may be questionable whether this provision applies (sec. 9.2 of general requirements), Red River did not remove the restraining rods, and left what it says was a temporary installation which, on the evidence, logically led others to conclude that it was permanent. Red River's employee, Elgin Bell, acknowledged in cross- examination that Red River did not inform Daplex that the rods were temporary which it ought to have done if the rods were indeed intended to be temporary.

The evidence also confirms that Red River backfilled the installation without the permission of the engineer, ignoring the requirements of the general provisions, and creating the situation which gave rise to the failure.

Attached to the report of Dr. W.W. Tennesey at Figure 2, following page 3, is a schematic diagram showing the relative positions of the restraining rods, the water pipes and the grade level. This Figure is remarkably similar to the requirements of NFPA 24, (see figure A-8-6.2(I)), but in each case there are no specifications of the type of steel to be used, other than as directed by NFPA 13 and 14 regarding protection from corrosive agents.

There is sufficient evidence to indicate that the design of installation carried out by Red River was consistent with industry standards at the time.

While NFPA 24, for reasons mentioned earlier, was not easily made available to Daplex or Red River, nevertheless Figure A-6. 2(i) contained in NFPA 24 describes in a general way the typical connection of a standpipe riser and demonstrates the anchoring methods with the use of restraining rods.

Red River paid no attention to the need for protective coating for the rods or the type of rods to be used, and therefore it was of no consequence to Red River whether the restraining rods were galvanized steel, protected steel or stainless steel. Whither testified that the plumbing code with reference to NFPA 13 and 14 had no application to the outside services contractor. He further testified that Red River should not have done the work, as it was fire protection work which was the responsibility of Daplex.

Once Red River took on the responsibility of performing plumbing services it had to follow the governing specifications. Red River did not do so, nor did it alert anyone to the limitations of its ability to do the work.

There was a difference of opinion between the parties, as mentioned above, where the outside services contractor's work started and terminated. It may also be that ordinarily the outside contractor does not do the interior plumbing work but if it undertakes to do so, the contractor is bound to do the work according to the specifications, and this Red River did not do.

The life of protected steel or stainless steel, according to the evidence of the metallurgist, is still less than the life of the building. With this knowledge the ideal installation would contain the riser pipe in a culvert away from the

corrosive soil and elements. In 1994, when the problem was rectified, the revised installation contained this type of design. I am not satisfied however, from the evidence, that the design of the repaired installation was the applicable industry standard at the time of the original installation. Nor am I satisfied that stainless steel was the accepted standard for private installations, although there was evidence that the City of Winnipeg had begun to use stainless steel in public installations.

The evidence generally does support the proposition that no installation short of the type ultimately constructed to correct the problem would have prevented a failure. Isolating the restraining rods from the corrosive elements in the crawl space, through the use of a culvert, would have provided permanent protection although coated or stainless steel rods would have significantly delayed the failure. Industry standards at the time did not include the construction of a protective culvert and NFPA 24 described an installation similar to the one Red River installed. The design, therefore, as found in NFPA 24, was the prevailing standard and therefore no liability arises based on the design itself.

Red River followed the proper design but failed to use adequate materials. Since Red River claims the installation was temporary, (but lead others to believe it was permanent), it did not consider the problem of corrosion on the restraints and is therefore primarily liable for the failure of the installation. Had it protected the steel rods in some fashion or used stainless steel, and had there been a failure years later, there may have been sufficient compliance with prevailing industry standards to avoid liability. But in this case Red River paid

no attention to the requirements as set out in the specifications regarding protective coating and must therefore be held responsible for the failure.

Daplex engaged Red River to do the outside services and directed the location within the structure where the transition piece was to be placed. The interior portion of the contract is ordinarily the responsibility of the plumbing contractor and Daplex must be taken to have an equal knowledge of the mechanical specifications as were imposed upon Red River. Had Newklas participated in these proceedings it might have looked to Daplex for indemnification but its failure to be involved did not result in any contractual claim for indemnification.

Liability of Daplex

Daplex, in my opinion, had a responsibility to ensure that the plumbing installation complied with the specifications and in particular, the protection that was to be afforded a permanent installation in a corrosive environment. Daplex, as the mechanical contractor, did not take sufficient precaution in monitoring the installation performed by Red River for whom it was responsible and is therefore negligent in its responsibility to Foyer for the installation of Red River. Requiring the outside services contractor to perform work not normally within the purview of that sub-trade, placed an even heavier responsibility on Daplex for the quality of the work carried out. Daplex cannot avoid responsibility in tort by claiming it relied on Red River since it engaged Red River to perform work which was not normally the work of the outside contractor.

The action against Daplex by the owner is not founded in contract inasmuch as Daplex is the sub-contractor of Newklas and accordingly, there is no privity of contract between it and the owner. Nonetheless, Daplex owed a general duty of care to ensure that its sub-trades performed their work to acceptable standards and complied with the general specifications. Daplex failed in its obligations to the owner in this regard.

Both Red River and Daplex are contractually obligated to the general contractor, who also has a primary contractual obligation to the owner to ensure that the work performed is in compliance with the general plans and specifications. Newklas failed in its contractual obligations to the owner, making it equally liable for the failure of Daplex and Red River.

The cross claims by Daplex and Red River against Dashevsky are dismissed in that neither can look to Dashevsky for indemnification for their own failure.

The engineer's duty to inspect is a duty owed to the client and not the contractor. It therefore follows that the contractor cannot recover against the engineer on the basis that the engineer should have noticed a failure to comply with the specifications. This principle is borne out in a passage from McLachlin, Wallace and Grant, *The Canadian Law of Architecture and Engineering,* Second

Edition, at p. 130:

> **2. Duty to Contractor**
>
> The architect's or engineer's duty of inspection is to the client, the project owner, not to the contractor. The contractor may request instructions or information from the architect or engineer on how to deal with problems which arise in the course of the work. In general, since construction methods are up to the contractor and since the architect's or engineer's duty is owed only to the owner, the contractor is not entitled to assistance, nor to extra pay for work done to remedy such problems. Nor is a contractor who is sued for breach of contract allowed to raise in defence the fact that the owner's architect or engineer was on site and should have given instructions to halt the activity which led to the loss. The contractor cannot recover from the architect or engineer on the ground that the architect or engineer should have noticed a failure to comply with the specifications and stopped the work. This applies even where the matter is one involving the safety of the contractor's employees.

Liability of Dashevsky

Dashevsky maintains that his plans and specifications adequately identified the nature of the work required and sufficiently specified how it was to be carried out. Dashevsky also had the responsibility to ensure that his plans and specifications were complied with and was therefore obligated to inspect the essential components of the mechanical contract.

In the decision of *Auto Concrete Curb Ltd. v. South Nation River Conservation Authority,* [1993] 3 SCR 201 (S.C.C.) McLachlin, J. in dealing with a design consultant's responsibilities states as follows:

> It has long been established that, barring specific arrangements to the contrary, the method by which a contractor chooses to execute the work falls within its sphere of responsibility, and that neither the owner or the design professionals employed by the owner have a duty to advise the contractor as to what method to choose, or how to go about accomplishing the work by whatever method the contractor in fact chooses.

This case is not a matter of Dashevsky relying upon the contractor in regards to the subsurface condition. The engineer was fully aware of the nature of the soil and its effect upon unprotected mild steel. Possession of that knowledge, coupled with the duty that he owed to the owner to inspect the installation, gives rise to his liability.

It is accepted that the design professional is only responsible for what reasonable supervision would disclose, a proposition supported by *Neisner-Kratt Enterprises Ltd. v. Building Design 2 Ltd.* (1988) 63 Sask.R. 26 and *Canyon Court Apartments Ltd. et al v. Faaci (E.J.) and Associates Ltd. et al* (1986) 40 Man.R. (2d) 270.

In the case at bar, reasonable supervision would have disclosed that soil had been backfilled around the installation encompassing the mild steel restraining rods. The engineer's error is not attributed to merely error in judgment; it was an act of neglect in failing to verify that the restraining rods

were amply protected according to prevailing industry standards, which Dashevsky says he adequately set out in the specifications. Dashevsky required there be no backfilling without his approval, and yet the evidence reveals that backfilling occurred without his approval. This act in itself ought to have raised concerns for Dashevsky about the installation, but they were ignored.

The installation of the fire sprinkler system was essential to the integrity of the building, and in particular, the protection of its residents was of paramount importance. Accordingly, the responsibility to review this aspect of the construction can easily be differentiated from less important aspects of the project. To inspect or correct the installation is not too high a responsibility for the mechanical engineer. The failure to do so amounts to more than bad judgment, it represents in my view, neglect respecting an integral component of the building. The mechanical engineer owed a duty to the owner to inspect important parts of the overall construction within his area of responsibility, and where potential damage may be caused through faulty work, which is easily detected, the engineer must bear the responsibility if it is not discovered. Inspection of this part of the construction is easily distinguished from the inspection of switches or hidden controls, which may be faulty or malfunction. In this case there were express provisions in Dashevsky's own plans that backfilling was not to take place until approved, a provision which Red River ignored and ought to have alerted Dashevsky to possible concerns. Furthermore, the mechanical engineer retains the right to have the installation dug up at the contractors expense if not satisfied, which Dashevsky chose not to do. These provisions written by the engineer highlight their importance and to

overlook them by failing to do a proper inspection in essential areas is a breach of his duty to the owner, and therefore amounts to negligence.

The evidence is clear that Dashevsky did not inspect the transition pipe installation, notwithstanding his awareness of the highly corrosive nature of the soil. The failure to monitor this aspect of the installation resulted in a breach of his duty of care to the owner of the facility, and he also is liable for the failure of the installation. The failure would not have taken place had there been a proper inspection. Counsel argues that if Dashevsky was negligent, it ought to be apportioned less to him than the contractors responsible for the work performed. I cannot come to a conclusion that Dashevsky's negligence is any less significant than the Daplex and Red River, and accordingly Dashevsky, Daplex and Red River are all found to be jointly and severally responsible to the plaintiff in negligence.

Cross-claim by Dashevsky

Dashevsky also claims by way of cross-claim against Number Ten, Daplex, Red River and Newklas. I have concluded that Number Ten is not liable to the owner arising out of the terms of its contractual relationship with the owner. It did not have the obligation to inspect the engineering component of the project, and in this respect did not breach its contractual relationship with Dashevsky, nor did it owe to Dashevsky any obligation at law, as I concluded earlier in disposing of the cross-claim by Daplex and Red River as against Dashevsky. Accordingly, the cross-claim by Dashevsky against Number Ten is dismissed.

I see no basis upon which to allow a cross-claim against Newklas. There was no evidence led as to any breach of obligations between Dashevsky and Newklas, either in contract or by law.

Dashevsky also cross-claims against Daplex and Red River, both of whom now have been found liable to the owner in negligence. Dashevsky claims entitlement to indemnification on the basis that, as the design consultant, he is entitled to reimbursement from a contractor who fails to carry out the project in accordance with the specifications. I have concluded that the plans and specifications adequately provide for the need of protective coating to the restraining rod. The failure by Red River to comply with the engineer's plans and specifications in that regard, and the failure of Daplex to ensure that its sub-trade, Red River, carried out the plans and specifications, make them liable to Dashevsky. The decision of *Bilodeau v. A. Bergeron and Fils Ltee* [1975] 2 S.C.R. 345 (S.C.C.), involved a relationship between a contractor (Bergeron) undertaking a contract with the Quebec Department of Highways in the construction of a viaduct in accordance with plans and specifications provided for by the engineer, Bilodeau. The specifications dictated the composition and type of concrete to be used. Bergeron engaged Dominion Ready Mix Inc. to supply the concrete and it was the concrete mixture that would ultimately prove inadequate, resulting in a claim by Bergeron against both Ready Mix and Bilodeau. The court found both Ready Mix and Bilodeau responsible to the contractor, but concluded that the engineer was entitled to reimbursement for the entirety of the claim from the concrete supplier, Ready Mix.

The circumstances of the *Bilodeau* decision differs slightly inasmuch as both Bilodeau and Ready Mix contracted with the contractor, Bergeron, to do independently different tasks. Ready Mix was required by the engineer's specifications to provide a certain mix of concrete, while Bilodeau undertook to make the inspection and ensure that the project was properly completed. The two tasks being different, they became jointly and severally liable to the contractor, but Bilodeau was entitled to indemnification from Ready Mix for its failure to provide the specified concrete. The Ready Mix company could not look to Bilodeau for compensation from it for Bilodeau's failure to inspect under Bilodeau's contract with the general contractor.

In this case, the engineer specified the requirement for protective coating and his failure to inspect makes him liable to the owner. As between Dashevsky, Red River and Daplex, the latter two cannot be entitled to compensation from Dashevsky for their failure to comply with Dashevsky's specifications and accordingly, Dashevsky is entitled to indemnification arising out of its cross-claim against Daplex and Red River, who are jointly and severally liable on the cross-claim to Dashevsky.

The court in the *Bilodeau* decision states as follows at p. 351:

> By failure to perform the obligation relevant to him, each party caused the whole damage, and must compensate Bergeron, by whom it was sustained, for all the loss. The fact that the co-authors of the damage are each held liable for the whole does not necessarily mean that a real joint and several bond exists between them. Their respective obligations were undoubtedly intended to concur, though in totally

> different ways, to delivery of a concrete with the required properties. But joint and several liability is not presumed. Ready Mix and Bilodeau were not jointly and severally bound, whether by contract, expressly or implicitly, or by the law, to provide what each had separately contracted for with the contractor. It was properly held by the Superior Court, and subsequently by the Court of Appeal, that with respect to Ready Mix, Bilodeau was a third party, bound by no obligation to the latter, and that the contract for supervision, concluded between Bilodeau and the contractor, - which had been required by the Department as an additional precaution to ensure that the concrete used by the contractor in making the girders had the required properties - in no way relieved Ready Mix of the obligation it had undertaken toward him to make and deliver such concrete. Thus, I do not see how Ready Mix could validly require that, as between itself and Bilodeau, the burden of compensating for the damage be shared, or in other words, how it could fairly be heard to say to Bilodeau: "Because you failred to supervise me properly, and you were bound to do so by your undertaking to the contractor, you must share with me the burden of making compensation and, to that extent, relieve me of it".

Liability of Number Ten

The legal and contractual obligations imposed upon Number Ten Architectural Group are spelled out in its contract with the owner. Number Ten engaged Dashevsky and is thereby responsible to the owner in contract for his failure. Number Ten has cross-claimed against Dashevsky and it should succeed in that claim.

The obligations of the architect with the owner are contained in the agreement as follows:

> 2.5.3 The Architect shall conduct inspections at intervals appropriate to the stage of construction which he considers necessary to enable him to determine if the Work is proceeding in general accordance with the Contract Documents. However, the Architect shall not be required to make exhaustive or continuous on site inspections to check the quality or quantity of the Work. On the basis of such on site observations, the Architect shall keep the Client informed of the progress and quality of the Work, and shall endeavour to guard the Client against defects and deficiencies in the Work of the Contractor, but he shall not be responsible for identifying defects or deficiencies in the Work which are not reasonably apparent or visible at the time of such inspections and which result from the Contractor's failure to carry out the work in accordance with the Contract Documents.

> 2.5.4 The Architect shall not have control or change of and shall not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, nor will he be responsible for the acts or omissions of the Contractor, Sub-contractors, or any other persons performing any of the Work, or for the failure of any of them to carry out the Work in accordance with the Contract Documents.

The foregoing imposes an obligation upon the Architect to perform certain functions of a structural nature of the contract, but does not require a continuous on site representative. The architectural responsibilities are aimed primarily at

the progress of the construction, along with the duty, obligation and responsibility for the structural design of the building. Except for the contractual obligation owed to the plaintiff for the omissions of the engineer engaged by it, Number Ten cannot be found liable in its own right for failure to carry out the terms of its contract with the owner. Number Ten, however, engaged Dashevsky and is therefore responsible in contract to the owner for his neglect.

Apportionment of Liability

In the final result, all defendants bear some liability for the loss to the owner.

Foyer is entitled to judgment against Red River and Daplex in negligence, based upon Red River's failure to protect the restraining rods. The plaintiff is also entitled to judgment against the engineer in negligence for his failure to adequately inspect the installation. The judgment in favour of Foyer against Red River, Daplex and Dashevsky is joint and several.

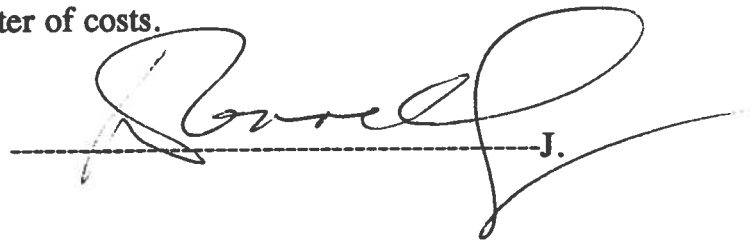
Dashevsky is entitled to indemnification based on his cross-claim against Red River and Daplex, also on a joint and several basis.

The plaintiff is entitled to judgment against the architect in contract for the negligence of the engineer, although the architect is entitled to indemnification against the engineer for his breach of duty to inspect.

Red River's cross-claims against Dashevsky, Newklas, Number Ten and Daplex are dismissed. Failure by Red River to comply with the specifications prepared by the engineering consultant does not result in any indemnification from him for his failure to inspect. Red River and Daplex are not entitled to rely upon the obligation of the mechanical engineer to inspect so as to abrogate their liability, hence the cross-claims of Red River and Daplex against the engineer is also dismissed.

The plaintiff is not contributorily negligent to any of the parties for the fact that it had its own employee on site. None of the parties established that this employee absolved any of them from the responsibility for their own contractual and legal obligations.

The parties may speak to the matter of costs.



J.